CLAIMS

We claim:

1. In a design tool, a method of presenting a schedule for a design including one or more loops, the method comprising:

displaying in a Gantt chart a top-level schedule; and

displaying a first loop schedule for a first loop, wherein timing within the first loop schedule is presented relative to the first loop schedule.

2. The method of claim 1 wherein the displaying the first loop schedule hierarchically nests the first loop schedule within the top-level schedule.

3. The method of claim 1 wherein each of the top-level schedule and the first loop schedule includes an independently numbered set of control steps.

4. The method of claim 3 wherein the first loop schedule begins with a control step 0 for non-real operations of the first loop schedule that execute in a clock cycle for a control step of the top-level loop schedule.

5. The method of claim 1 wherein before the displaying the first loop schedule, the top-level schedule includes an icon summarizing the first loop schedule, wherein timing within the top-level schedule is presented as independent of latency of the first loop schedule.

6. The method of claim 1 further comprising:

hiding the first loop schedule responsive to a command from a designer.

7. The method of claim 1 further comprising:

displaying a textual list of scheduled operations; and

displaying an icon adjacent a first loop label in the textual list, the icon indicating whether the first loop schedule is expanded or collapsed.

8. The method of claim 1 further comprising:

displaying a second loop schedule for a second loop, wherein timing within the second loop schedule is presented relative to the second loop schedule.

9. The method of claim 1 wherein the Gantt chart includes at least one pseudo-operation icon.

10. The method of claim 1 wherein the first loop includes plural alternative branches of execution having different lengths, wherein timing within the first loop is independent of the different lengths of the plural branches.

11. The method of claim 1 wherein the design tool is a behavioral synthesis tool.

12. A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 1.

13. In a design tool, a method of presenting information for a design, the method comprising:

presenting first information for a block of a design, the block including a sub-block; and

presenting second information for the sub-block of the design, wherein timing within the block is presented as independent of sub-block delay.

14. The method of claim 13 wherein the block is for a top-level loop, wherein the top-level loop includes a nested loop, and wherein the sub-block is for the nested loop.

15. The method of claim 13 wherein the sub-block is for one of plural alternative branches of execution within the block.

16. The method of claim 13 wherein the first information is a block schedule and the second information is a sub-block schedule.

17. The method of claim 13 wherein the first information is a block schedule and the second information is an icon representing a sub-block schedule.

18. The method of claim 17 wherein the icon appears in a clock overhead space of a control step of the block schedule.

19. The method of claim 13 wherein timing within the sub-block is presented relative to the sub-block.

20. The method of claim 13 wherein each of the block and the sub-block includes an independently numbered set of control steps.

21. The method of claim 13 wherein the presenting the second information nests the second information within the first information.

22. The method of claim 13 wherein the presenting the second information is in a separate window.

23. The method of claim 13 further comprising:

presenting a list of operation labels, one or more sub-block operation labels indented relative to one or more block operation labels in the list.

24. The method of claim 13 further comprising:

presenting third information for a second sub-block of the design, wherein timing within the block is presented as independent of second sub-block delay.

25. The method of claim 13 wherein the design tool is a behavioral synthesis tool.

26. A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 13.

27. In a design tool, a hierarchical Gantt chart comprising:

plural nested schedules for a design, each of the plural nested schedules including:

a line of control step labels; and

one or more lines of schedule information, each of the one or more lines of schedule information including at least one operation icon.

28. The hierarchical Gantt chart of claim 27 wherein the plural nested schedules include a top-level schedule, and wherein presentation of each of the plural nested schedules other than the top-level schedule is in a clock overhead space of a control step of the schedule enclosing the nested schedule.

29. The hierarchical Gantt chart of claim 27 wherein presentation of each of the plural nested schedules expands or collapses responsive to designer input.

30. The hierarchical Gantt chart of claim 27 wherein the design tool is a behavioral synthesis tool.

31. In a design tool, a method of presenting a list of operations for a design, the method comprising:

presenting a top-level list of one or more operations for a design, wherein the top-level list includes a first block label for a first block; and

presenting a sub-list of one or more operations for the first block, the sub-list indented relative to the top-level list.

32. The method of claim 31 further comprising:

responsive to a collapse command, hiding the sub-list.

33. The method of claim 31 wherein the design tool is a behavioral synthesis tool.

34. A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 31.

35. In a design tool, a method of presenting a list of operations for a design, the method comprising:

presenting a top-level list of one or more operations for a design, wherein the top-level list includes a first block label for a first block; and

presenting an icon adjacent the first block label, the icon indicating whether a sub-list of one or more operations for the first block is expanded or collapsed.

36. In a design tool, a method of displaying a design schedule comprising:

displaying one or more real operation icons, each representing a real operation and having a delay-indicating characteristic; and

displaying one or more pseudo-operation icons, each representing a pseudo-operation and having a delay-independent characteristic different than the delay-indicating characteristic.

37. The method of claim 36 wherein each of the one or more real operation icons is a rectangle with a delay-indicating width, and wherein each of the one or more pseudo-operation icons is a circle.

38. The method of claim 36 wherein a first pseudo-operation icon has a color different than a real operation icon color.

39. The method of claim 36 wherein each operation icon includes one or more characters identifying the operation icon.

40. The method of claim 36 wherein the design tool is a behavioral synthesis tool.

41. A computer-readable medium storing computer-executable instructions for causing a computer programmed thereby to perform the method of claim 36.